

Supplemental Table 1. List of DH lines used for screening SSR markers

DH line	Original inbred lines		
	Name	Accession number	Country
3DH014	Yangyou1	2680	China
3DH013	Qingyou6	1310	China
3DH020	Yunyou11	3100	China
3DH032	P7	3382	Poland
3DH065	WW.Hanna	3484	Sweden
3DH050	H54	3482	Sweden
3DH099	Bok.Wok 13	3502	USA
3DH022	Fuyou1	3109	China

Supplemental Table 2. List of rapeseed inbred lines used in present study

Accession number	Name	Country/Region	Type
1183	Shengli52	Shanghai (China)	Semi-winter OSR
1188	Gongnong1	Shanghai (China)	Semi-winter OSR
1193	Huyou2	Shanghai (China)	Semi-winter OSR
1212	Ningyou1	Jiangsu (China)	Semi-winter OSR
1222	363	Hubei (China)	Semi-winter OSR
1228	Ganyou2	Hubei (China)	Semi-winter OSR
1230	Ganyou4	Hubei (China)	Semi-winter OSR
1237	Huayou3	Huazhong (China)	Semi-winter OSR
1244	Huayou13	Hubei (China)	Semi-winter OSR
1264	Chuannongchangjiao	Sichuan (China)	Semi-winter OSR
1287	Yiyou3	Sichuan (China)	Semi-winter OSR
1307	Yunyou7	Yunnan (China)	Semi-winter OSR
1309	Yunyou49	Yunnan (China)	Semi-winter OSR
2638	Luojingxuanxi	Shanghai (China)	Semi-winter OSR
2649	Xinghuangha	Shanghai (China)	Semi-winter OSR
2653	Youguangye	Shanghai (China)	Semi-winter OSR
2679	Yang2008	Jiangsu (China)	Semi-winter OSR
2683	Sui1-4	Jiangsu (China)	Semi-winter OSR
2700	3209	Anhui (China)	Semi-winter OSR
2714	Guangde741	Anhui (China)	Semi-winter OSR
2719	698-141	Anhui (China)	Semi-winter OSR
2787	Ganyou5	Hubei (China)	Semi-winter OSR
2821	Huayou16	Huazhong (China)	Semi-winter OSR
2823	Huahuang1	Huazhong (China)	Semi-winter OSR
2840	57A	Hunan (China)	Semi-winter OSR
2873	6024-2	Hunan (China)	Semi-winter OSR
2874	6012-1	Hunan (China)	Semi-winter OSR
2875	6024-1	Hunan (China)	Semi-winter OSR
2889	78007	Hunan (China)	Semi-winter OSR
2890	36220	Hunan (China)	Semi-winter OSR
2893	4050-4149	Hunan (China)	Semi-winter OSR
2894	77054-2	Hunan (China)	Semi-winter OSR
2912	3145-60	Hunan (China)	Semi-winter OSR
2914	Eh3143	Hunan (China)	Semi-winter OSR
2917	4092	Hunan (China)	Semi-winter OSR
2924	3W042	Hunan (China)	Semi-winter OSR
2972	Yueyang84-8	Hunan (China)	Semi-winter OSR
3043	Binyou1	Jiangxi (China)	Semi-winter OSR
3050	408-8	Jiangxi (China)	Semi-winter OSR
3067	72-2	Chongqing (China)	Semi-winter OSR
3074	Jinyou15	Sichuan (China)	Semi-winter OSR
3078	Piyou23	Sichuan (China)	Semi-winter OSR
3086	213	Sichuan (China)	Semi-winter OSR
3100	Yunyou11	Yunnan (China)	Semi-winter OSR
3101	Yunyou12	Yunnan (China)	Semi-winter OSR
4532	Baihua (2)	Anhui (China)	Semi-winter OSR
4533	Baihua (3)	Anhui (China)	Semi-winter OSR
4553	Zaofeng5	Shanxi (China)	Semi-winter OSR
4586	Zoumayang	Hubei (China)	Semi-winter OSR
4588	Geleche Yangyoucai	Hubei (China)	Semi-winter OSR
4601	85-1	Hubei (China)	Semi-winter OSR
4604	Enyou2	Hubei (China)	Semi-winter OSR
4605	Zhongyoudijie1	Hubei (China)	Semi-winter OSR
4625	88-161	Hunan (China)	Semi-winter OSR
4626	Penglai1	Hunan (China)	Semi-winter OSR
4636	320	Hunan (China)	Semi-winter OSR
4678	III-227	Sichuan (China)	Semi-winter OSR
4679	III-229	Sichuan (China)	Semi-winter OSR
4708	88-2	Sichuan (China)	Semi-winter OSR
4711	86126-1-2	Sichuan (China)	Semi-winter OSR
4721	1-63	Sichuan (China)	Semi-winter OSR
4755	86-18-II-14	Chongqing (China)	Semi-winter OSR
4767	Kaiyou1	Guizhou (China)	Semi-winter OSR
4793	87-9	Hubei (China)	Semi-winter OSR
5721	6084	Anhui (China)	Semi-winter OSR
5731	Gsb612	Anhui (China)	Semi-winter OSR
5736	Gsb641	Anhui (China)	Semi-winter OSR

Supplemental Table 2. (continued)

Accession number	Name	Country/Region	Type
5754	950246	Anhui (China)	Semi-winter OSR
5755	950229	Anhui (China)	Semi-winter OSR
5756	951061	Anhui (China)	Semi-winter OSR
5913	97Xuan	Sichuan (China)	Semi-winter OSR
5914	Chuangyou96li45	Sichuan (China)	Semi-winter OSR
5916	I-Y-14youcai	Sichuan (China)	Semi-winter OSR
5940	Jianyang Youcai	Sichuan (China)	Semi-winter OSR
5941	Y018	Sichuan (China)	Semi-winter OSR
5947	Hea20	Sichuan (China)	Semi-winter OSR
5951	93355	Sichuan (China)	Semi-winter OSR
5954	90-5047	Sichuan (China)	Semi-winter OSR
5963	Chuangyou92-005	Sichuan (China)	Semi-winter OSR
5964	Chuangyouh-53	Sichuan (China)	Semi-winter OSR
5965	Chuangyou92-028	Sichuan (China)	Semi-winter OSR
5973	Mianhui1	Sichuan (China)	Semi-winter OSR
5979	Mianza94-13	Sichuan (China)	Semi-winter OSR
5986	Chuangyou933059	Sichuan (China)	Semi-winter OSR
5987	Chuangyou92-054	Sichuan (China)	Semi-winter OSR
5989	Heiyoucai	Sichuan (China)	Semi-winter OSR
5990	Chengkoushengli	Sichuan (China)	Semi-winter OSR
6038	Kao-48	Hubei (China)	Semi-winter OSR
6043	Zhongshuang4	Hubei (China)	Semi-winter OSR
6140	Hn-9464	South Korea	Semi-winter OSR
6648	Zheyu17	Zhejiang (China)	Semi-winter OSR
6871	P6036-2	Hubei (China)	Semi-winter OSR
6873	Zhongshuang12	Hubei (China)	Semi-winter OSR
6894	99-1055	Jiangsu (China)	Semi-winter OSR
6932	Zhongshuang9	Hubei (China)	Semi-winter OSR
6940	Zheyu18	Zhejiang (China)	Semi-winter OSR
6941	You88	Zhejiang (China)	Semi-winter OSR
6943	Huyou17	Shanghai (China)	Semi-winter OSR
6968	Zhongnongyou136	Hubei (China)	Semi-winter OSR
6979	Huyou18	Shanghai (China)	Semi-winter OSR
7022	Hongyou3	Yunnan (China)	Semi-winter OSR
7028	24729	Hubei (China)	Semi-winter OSR
7412	Suj209	Jiangsu (China)	Semi-winter OSR
7413	Zheyu6001	Zhejiang (China)	Semi-winter OSR
7415	68232	Hubei (China)	Semi-winter OSR
7421	Yan6015	Jiangsu (China)	Semi-winter OSR
7422	Yangj6771	Jiangsu (China)	Semi-winter OSR
1345	Zephyr	Canada	Spring OSR
1346	Midasi	Canada	Spring OSR
1347	Turret	Canada	Spring OSR
1348	ORO	Canada	Spring OSR
3109	Fuyou1	Fujian (China)	Spring OSR
3112	Meijian	Tibet (China)	Spring OSR
3251	Semuda 16/81	Canada	Spring OSR
3253	Golda	Canada	Spring OSR
3264	Ab448	Australia	Spring OSR
3271	Bln240	Australia	Spring OSR
3272	Bln241	Australia	Spring OSR
3274	Bln247	Australia	Spring OSR
3275	DH9-2	Australia	Spring OSR
3278	Marnoo	Australia	Spring OSR
3279	Ru6	Australia	Spring OSR
3282	Wesreo	Australia	Spring OSR
3286	Wesbrook	Australia	Spring OSR
3288	Wille	Danmark	Spring OSR
3289	Dandi	Denmark	Spring OSR
3359	HJa82414	Finland	Spring OSR
3360	Hja 82470	Finland	Spring OSR
3361	Hja 82703	Finland	Spring OSR
3362	Hja 82708	Finland	Spring OSR
3398	Prota 3129	France	Spring OSR
3399	Remeo	France	Spring OSR
3404	Topas-15	France	Spring OSR
3417	Lingot	France	Spring OSR

Supplemental Table 2. (continued)

Accession number	Name	Country/Region	Type
3439	Cresor	France	Spring OSR
3450	Wipot	Norway	Spring OSR
3464	Omega	Sweden	Spring OSR
3469	Ww 1307	Sweden	Spring OSR
3472	Olga	Sweden	Spring OSR
3483	H55	Sweden	Spring OSR
3486	Sv.Tyko	Sweden	Spring OSR
3487	Sv.Global	Sweden	Spring OSR
3489	Wester Zn6-2836	Canada	Spring OSR
3493	Target	Sweden	Spring OSR
3494	Altex	Sweden	Spring OSR
3495	Andor	Sweden	Spring OSR
3503	Dac Chosen	USA	Spring OSR
4822	Xuanma2	Heilongjiang (China)	Spring OSR
5067	Pivot	Canada	Spring OSR
5073	Shiralee	Australia	Spring OSR
5075	Yic Kaden	Australia	Spring OSR
5085	Optima	Denmark	Spring OSR
5086	Wikki	Denmark	Spring OSR
5171	Sielecki	France	Spring OSR
5202	Tornado	Sweden	Spring OSR
5209	Legend	Sweden	Spring OSR
5210	Grant	Sweden	Spring OSR
5214	Topas.No. 6050	Sweden	Spring OSR
5218	Celebra	Canada	Spring OSR
6019	9918	Qinghai (China)	Spring OSR
6106	Cresor	France	Spring OSR
6115	Startigh	Sweden	Spring OSR
6117	Bounty	Sweden	Spring OSR
6141	Garrison	Sweden	Spring OSR
6143	Coronet	Sweden	Spring OSR
6146	guue	Sweden	Spring OSR
6154	Iupiter	Sweden	Spring OSR
6192	Wester	Canada	Spring OSR
6219	Hanna	Sweden	Spring OSR
6220	Marnoo-2	Australia	Spring OSR
6228	ReainaII	Sweden	Spring OSR
1334	Shengli Youcai	Japan	Winter OSR
1339	Chikuzen	Japan	Winter OSR
1343	Wase Cyousenn	Japan	Winter OSR
1355	Europ	France	Winter OSR
1360	Poland(2)	Poland	Winter OSR
1368	England Short	United Kingdom	Winter OSR
1370	Major	France	Winter OSR
1373	Primor	France	Winter OSR
2734	2734	Italy	Winter OSR
2775	Nanyang41	Henan (China)	Winter OSR
2776	Kai07	Henan (China)	Winter OSR
2779	Xinglong1	Henan (China)	Winter OSR
2784	51	Henan (China)	Winter OSR
2786	Heyou1	Henan (China)	Winter OSR
3236	Dong-Hae23	Japan	Winter OSR
3238	Kojo 57	Japan	Winter OSR
3239	Norin 34	Japan	Winter OSR
3240	Ganpol	Japan	Winter OSR
3244	Aomori	Japan	Winter OSR
3245	Norin16	Japan	Winter OSR
3254	Narc	Pakistan	Winter OSR
3258	Changranyoucai-2	North Korea	Winter OSR
3260	Rongshanyoucai	North Korea	Winter OSR
3262	Superlati-Velot601	New Zealand	Winter OSR
3263	Rangi	New Zealand	Winter OSR
3269	Liraglu	Australia	Winter OSR
3293	H19	Hungary	Winter OSR
3296	Liradonne	Germany	Winter OSR
3304	Expander	Germany	Winter OSR
3305	Erra	Germany	Winter OSR

Supplemental Table 2. (continued)

Accession number	Name	Country/Region	Type
3306	Quinta	Germany	Winter OSR
3308	Ligora	Germany	Winter OSR
3319	Dsv-Sr50	Germany	Winter OSR
3323	Doral	Germany	Winter OSR
3345	H26	Germany	Winter OSR
3349	H32	Germany	Winter OSR
3351	Sollux	Germany	Winter OSR
3366	H44	Russia	Winter OSR
3368	H46	Russia	Winter OSR
3369	H47	Russia	Winter OSR
3374	Janpol	Poland	Winter OSR
3378	Tripol	Poland	Winter OSR
3381	P6	Poland	Winter OSR
3383	H38	Poland	Winter OSR
3386	Mikado	United Kingdom	Winter OSR
3388	77-258	United Kingdom	Winter OSR
3390	Gonda	Canada	Winter OSR
3392	P20	United Kingdom	Winter OSR
3394	Mochowski	France	Winter OSR
3396	Nachan	France	Winter OSR
3427	H25	France	Winter OSR
3455	H40	Czech	Winter OSR
3457	P11	Czech	Winter OSR
3482	H54	Sweden	Winter OSR
5068	Annick	South Korea	Winter OSR
5087	Viking	Denmark	Winter OSR
5106	Parter	Germany	Winter OSR
5160	Falcon	Germany	Winter OSR
5175	Ew-2	United Kingdom	Winter OSR
5197	Roman-1	Holand	Winter OSR
5226	Arabelle	Canada	Winter OSR
5787	96786	Shanxi (China)	Winter OSR
5788	961331	Shanxi (China)	Winter OSR
5863	96628	Shanxi (China)	Winter OSR
5897	Huangzi4	Shanxi (China)	Winter OSR
5901	Huangzi8	Shanxi (China)	Winter OSR
6150	Guuiver	Sweden	Winter OSR
6155	Casion	Sweden	Winter OSR
6177	Haya natane	Japan	Winter OSR
6178	Asaju natane	Japan	Winter OSR
6179	Tojiwa natane	Japan	Winter OSR
6185	Kinkai natane	Japan	Winter OSR
6187	Miyukai natane	Japan	Winter OSR
6188	Yiwashilo natane	Japan	Winter OSR
6197	Gesunder	Germany	Winter OSR
6198	Disamant	Germany	Winter OSR
6206	Mar	Poland	Winter OSR

Supplemental Table 3. List of wild *Brassica oleracea*, resynthesized *B. napus*, modern cultivars and F₁ lines

Accession number	Name	Country/Region	Type
8WS002	C1-3	Spain	<i>B. oleracea</i> ssp. <i>oleracea</i>
8WS006	C1-7A	Spain	<i>B. oleracea</i> ssp. <i>oleracea</i>
8WS009	C1-9A	Spain	<i>B. oleracea</i> ssp. <i>oleracea</i>
8WS014	C2-4	Spain	<i>B. oleracea</i> ssp. <i>oleracea</i>
8WS017	C2-7A	Spain	<i>B. oleracea</i> ssp. <i>oleracea</i>
8WS020	C2-9	Spain	<i>B. oleracea</i> ssp. <i>oleracea</i>
8WS032	C2-20	Spain	<i>B. oleracea</i> ssp. <i>oleracea</i>
8WS035	C3-1	Spain	<i>B. oleracea</i> ssp. <i>oleracea</i>
8WS036	C3-2	Spain	<i>B. oleracea</i> ssp. <i>oleracea</i>
8WS038	C3-4	Spain	<i>B. oleracea</i> ssp. <i>oleracea</i>
8WS056	C4-2	Spain	<i>B. oleracea</i> ssp. <i>oleracea</i>
8WS065	C4-11	Spain	<i>B. oleracea</i> ssp. <i>oleracea</i>
8WS072	C5-4	Spain	<i>B. oleracea</i> ssp. <i>oleracea</i>
8WS077	C5-9	Spain	<i>B. oleracea</i> ssp. <i>oleracea</i>
8WS086	C5-19	Spain	<i>B. oleracea</i> ssp. <i>oleracea</i>
8WS092	L03	Spain	<i>B. oleracea</i> ssp. <i>oleracea</i>
8WS098	L09	Spain	<i>B. oleracea</i> ssp. <i>oleracea</i>
8WS099	L010	Spain	<i>B. oleracea</i> ssp. <i>oleracea</i>
8WS119	L3-1	Spain	<i>B. oleracea</i> ssp. <i>oleracea</i>
8WS130	L3-12	Spain	<i>B. oleracea</i> ssp. <i>oleracea</i>
8WS042	C3-8	Spain	<i>B. oleracea</i> ssp. <i>oleracea</i>
8WS060	C4-6	Spain	<i>B. oleracea</i> ssp. <i>oleracea</i>
8WS121	L3-2	Spain	<i>B. oleracea</i> ssp. <i>oleracea</i>
8WS015	C2-17	Spain	<i>B. oleracea</i> ssp. <i>oleracea</i>
8WS037	C3-7	Spain	<i>B. oleracea</i> ssp. <i>oleracea</i>
3DH161	Res-1 (C3-8 × jingxuanhuangxinwu)	–	Resynthesized <i>B. napus</i>
6873	Zhongshuang12	Hubei (China)	Modern cultivar (Semi-winter OSR)
	Gaoyouzhongshuang11	Hubei (China)	Modern cultivar (Semi-winter OSR)
7419	Huyou21	Shanghai (China)	Modern cultivar (Semi-winter OSR)
3455	H40	Zhejiang (China)	Modern cultivar (Semi-winter OSR)
7423	G142	Zhejiang (China)	Modern cultivar (Semi-winter OSR)
6648	Zheyu17	Zhejiang (China)	Modern cultivar (Semi-winter OSR)
3DH146	Zhongshuang12 × Res-1	–	F ₁
3DH153	Huyou21 × Res-1	–	F ₁
3DH158	H40 × Res-1	–	F ₁
3DH162	Zheyu17 × Res-1	–	F ₁
3DH155	G142 × Res-1	–	F ₁
3DH152	Gaoyouzhongshuang11 × Res-1	–	F ₁
3DH154	Res-1 × Zhongshuang12	–	F ₁

Supplemental Table 4. Information on the 43 primer pairs of SSR markers used in this study

Markers	Sequence of forward	Sequence of reverse	Linkage group (A genome)	Linkage group (C genome)	Allelic variation (A subgenome)	Allelic variation (C subgenome)
BRAS078	ATTGGGTTCTGACCTTTTCTC	CTTTTCTCATCGCTACCAC	A1	-	110, 112, 116	-
BRAS084 ^c	ATTGGGTTCTGACCTTTTCTC	TTTTCTTCATCGCTACCAC	A1	-	109, 111, 115	-
BnGMS0075	TCACTAGACGAAAGTTGAGCCA	TGCTTAIGGTAATGTTTGCCAGG	A2	-	116, 119, 122, 125	-
BnGMS0078	TTAGCTTTAACAGCCAGCTT	TTGCCCTCTCAATCACTGT	A2	-	228, 232	-
BnGMS0085	AGAAACGCAAGAGGGTAITCCT	TGACGGTATGTTTTCAACTCG	A3	-	345, 355, 359, 363	-
OL11B05	TCGGCAGGTTGTTTTGTTC	ACCATCTTCCCTCGACCCTG	A3	-	110, 114, 118, 120	-
BnGMS0165	ATTGACGCAGTGTCTTCTCT	AAACAATAAGCCAAACGAAAG	A4	-	346, 356, 360, 364	-
BnGMS0135	GCATCACCCCTAGTTAATCGAA	AAGAAGGGAGAAACCTGAAACC	A4	-	194, 201, 203, 212	-
BnEMS0847	GTTTGCCTTACAAAGACCTGG	CACACCTTACCACGTTCTT	A5	-	260, 262	-
BnGMS0662 ^c	CGATCGAATGCACTGTACT	ATGCACAGAGCTGAAGAAAT	A5	-	199, 201, 203	-
BnGMS0929	TCAGACCCAAAGCCAGTT	TTGTGGAAGATGAAACCATT	A6	-	241, 253	-
BnEMS0921	GTGCTGCTGCTCTTCTTAT	CAATGAGTAGGGTCCGATGAT	A6	-	153, 157	-
CB10330	AGCGGATTTACGAGGAT	ACCTGCACCAATCATTTG	A6	-	138, 140, 146, 150	-
BnGMS0171	GATACACAACACGCAACACAA	GGATTGCAITGTTCTGACTG	A7	-	174, 178, 186, 190	-
BnGMS0422	TGGAGAAGAAGGCTATACACA	TCACACAGGGTAAAGGTAG	A7	-	306, 316, 318, 320, 322, 324	-
BnGMS0373 ^c	CAGATAAATTTGGTAGCTCA	TATGGATCTGGAATACTGAA	A8	-	272, 274, 280	-
BnGMS0452	TAGATGGTCTTGACCCATA	AACATGCTTTGATGAAGCC	A8	-	201, 205, 207	-
BnEMS0810	AGAAGAAGCAGCAAGAACAG	TACTAGTTTCGAAAGCCGAG	A9	-	210, 216, 219	-
BnGMS0961	CTCACCTTCTAAAGCCATATC	AAGTGAITACCAGAAAGTCGATGC	A9	-	313, 329, 332, 340	-
NA10D09	AAGAACGTCAAGATCCTCTGC	ACCACACGGTAGTAGAGCG	A9	-	283, 369, 380	-
BnGMS0780	GCACGATGGCAITCACATAACAT	TTCTGTGCTAGTCTGCC	A9	-	354, 362	-
CB10524	ATGGAAGGCCAACGATTCT	TTCGTGCTAGTCTGCC	A10	C9 ^d	216, 222, 224	237
Na10D07	CTACTTTGATGGACACTTGGC	TCTGAAATGATAGTCCGGTCC	A10	-	107, 109, 117	-
BnGMS0633	CCAGTCCCAATCTCAATCAG	TATTTGTGTTCTCACGATGG	-	C1	-	312 ^a , 314, 339 ^b , 348 ^b , 350 ^b , 352 ^b , 354 ^b
CB10258	ATGATGCCTAGCATGTCC	AAGCTAAAAGCGAAAAGAACG	-	C1	-	155, 161, 167 ^b , 170 ^b , 176 ^b , 180, 183 ^b , 198 ^b , 201 ^b
CB10369	CATTACAGGACCAGAGC	CAAAAGCCAAAGACAACCAT	-	C1	-	148, 165, 168 ^b , 171, 174
BnGMS0486	AAGGAGGAACCAATGTC	TGATAATGCCACTGATAGGAC	-	C2	-	168 ^a , 177 ^b , 180, 183
BnGMS0738	TTGAGGAAGGAACACGAA	GTGGGAGAGTGAGGGTAGTAA	-	C2	-	235 ^b , 238 ^b , 241, 244, 247
BnGMS0631	CCATTAITCAITGTTACCACC	CCTCGCTCCTAGTAGGTACA	-	C3	-	361, 363 ^b , 367 ^b , 377 ^b , 401
CB10427	TCCCAACAAAAGAGTCCA	CAGCGAACCCGAGTCTAAA	-	C3	-	145, 148, 151, 157
BnGMS0490	AGTTGGTAGCCAAAGTGAAA	CTCTTATGCCAATCTCATCC	-	C4	-	332, 342 ^a
CB10320	AGTGCATGATGAAGGCAT	GGGAATCCATGGCTGTA	-	C4	-	248254
BnEMS0158	GTTATCTTGCTTCACTTCCT	TACGGCTTCATCTCATACATC	-	C5	-	152161
BnGMS0949	CTCCTCCTCTTTCATCTTC	TTCGTCTCCCTTCTCTGTAA	-	A10 ^d	240, 250	174, 176, 178 ^b , 180 ^b
BnGMS1493	CGTAGAGAGATTTGGAAGCA	GTCTCCTCCGTAATGGTGT	-	C6	-	162167179
BnGMS1697 ^c	AGAGACAAACCAAGCCTTGGAC	GCGAITTCAGAGAGGTAGAGGA	-	C6	-	198, 208, 210, 213 ^a
BnGMS1909 ^c	AGGTGCAATAAGCTGTCTCTCC	AAACTCGAGCTTATCAGCTGT	-	C6	-	193, 198 ^b , 204, 208 ^a
BnGMS0386 ^c	TTGGCTCAITCAATGACAATA	ACAATGTGGTAAACACGAAA	-	C7	-	213216220
BnGMS2095 ^c	CCATGCTGTAGGCAATAAGTA	TGGACATGGACCAATAGTAGT	-	C7	-	193 ^b , 195 ^b , 208, 212 ^b , 214, 218 ^a
BnGMS2499 ^c	TATACGATGTCTCTCCCTCTC	TCGTACAGGTGAATACGCAAG	-	C7	-	192, 204 ^b , 210, 238 ^b , 240 ^b
BnGMS003	AAAGAGCCACATGAAAGTA	TGAACCTAGGCACCAAGAAT	-	C8	-	329, 335, 338 ^a , 359 ^a , 362 ^a
BnEMS0509 ^c	TGAATGTGCTTCTTCGATG	TTCAAGCTCGTTCACCTCT	-	C8	-	198, 202 ^a , 210
BnEMS0628a	GCTAAGGGTGGTCTTATCT	TCTCAACACCAAAAGAACAAA	-	C9	-	267, 271, 274 ^b
BnEMS0628b	GCTAAGGGTGGTCTTATCT	TCTCAACACCAAAAGAACAAA	-	C9	-	258, 261

^a represents the allelic variation exists in *B. napus* but not in *B. oleracea*.

^b represents the allelic variation exists in *B. oleracea* but not in *B. napus*.

^c represents the single-locus nature of the marker that was also detected by Li, Q. *et al.* (2013).

^d represents the chromosome information that was inferred by aligning their sequences with the genome sequence of *B. rapa* and *B. oleracea* by using BLASTn.